CLAIMS

WHAT IS CLAIMED:

1. A logic gate, comprising:

a low noise current source coupled between a first terminal of a voltage supply and an output terminal, said low noise current source being capable of delivering a preselected voltage signal to said output terminal having a magnitude responsive to a first control signal relatively independent of the magnitude of the voltage on said first terminal of said voltage supply; and

at least one switching element coupled between the output terminal and a second terminal of the voltage supply, said switching element being capable of coupling said output terminal to said second terminal of said voltage supply in response to receiving a control signal.

2. A logic gate, as set forth in claim 1, wherein said low noise current source includes a transistor and a resistor serially coupled between the first terminal of the voltage supply and the output terminal, the transistor having a gate capable of receiving the first control signal.

3. A logic gate, as set forth in claim 2, wherein said transistor is an intrinsic transistor.

4. A logic gate, as set forth in claim 1, including a capacitor coupled between the output terminal and the second terminal of the voltage supply.

5. A logic gate, as set forth in claim 1, including at least one clamping diode coupled between the output terminal and the second terminal of the voltage supply.

6. A logic gate, comprising:

a low noise current source coupled between a first terminal of a voltage supply and an output terminal, said low noise current source including an intrinsic transistor being capable of delivering a preselected voltage signal to said output terminal having a magnitude responsive to a first control signal relatively independent of the magnitude of the voltage on said first terminal of said voltage supply; and

at least one switching element coupled between the output terminal and a second terminal of the voltage supply, said switching element being capable of coupling said output terminal to said second terminal of said voltage supply in response to receiving a control signal.

7. A logic gate, as set forth in claim 6, wherein said low noise current source includes a resistor serially coupled with said intrinsic transistor between the first terminal of the voltage supply and the output terminal, the intrinsic transistor having a gate capable of receiving the first control signal.

8. A logic gate, as set forth in claim 6, including a capacitor coupled between the output terminal and the second terminal of the voltage supply.

9. A logic gate, as set forth in claim 6, including at least one clamping diode coupled between the output terminal and the second terminal of the voltage supply.